

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-15 (cancelled)

16. (new) Method for reducing the interfering signals in an electro-optical measuring process whereby the coherence of a light beam is reduced before incidence on a photoreceiver (2) comprising an electro-optical mixer (6).

17. (new) Method according to Claim 16 wherein a scattering unit (3) is used to reduce the coherence.

18. (new) Method according to Claim 17 wherein an optical fiber is used as the scattering unit (3).

19. (new) Method according to Claim 17 wherein a rough layer (8) that is applied to the electro-optical mixer (6) is used as the scattering unit (3).

20. (new) Method according to Claim 17 wherein a diffusing lens is used as the scattering unit (3).

21. (new) Method according to claim 16 wherein a current pulse modulation or excitation of several modes of a laser beam are embodied particularly within a laser diode.

22. (new) Electro-optical mixing device with at least one light source (1) and one photoreceiver (2) wherein a coherence suppression of a laser beam before incidence on a

photoreceiver (2) particularly an electro-optical mixer (6) is achieved by means of a coherence-reducing unit.

23. (new) Device according to Claim 22 wherein the coherence-reducing unit is a scattering unit (3).

24. (new) Device according to Claim 23 wherein the scattering unit (3) is an optical fiber.

25. (new) Device according to Claim 23 wherein the scattering unit (3) is a diffusing lens.

26. (new) Device according to claim 23 wherein, a rough layer (8) is applied to a photoreceiver (2) as a scattering unit (3), particularly an electro-optical mixer (6).

27. (new) Device according to Claim 26 wherein the rough layer (8) has scattering particles and / or a rough surface.

28. (new) Device according to claim 23 wherein a housing (7) forms the photoreceiver (2) which particularly includes the electro-optical mixer (6) and the scattering unit (3').

29. (new) Device according to Claim 22 wherein the coherence-reducing unit is a light wave modulation unit.

30. (new) Device according to claim 24 wherein a housing (7) forms the photoreceiver (2) which particularly includes the electro-optical mixer (6) and the scattering unit (3').

31. (new) Device according to claim 25 wherein a housing (7) forms the photoreceiver (2) which particularly includes the electro-optical mixer (6) and the scattering unit (3').

32. (new) Device according to claim 26 wherein a housing (7) forms the photoreceiver (2) which particularly includes the electro-optical mixer (6) and the scattering unit (3'').

33. (new) Device according to claim 27 wherein a housing (7) forms the photoreceiver (2) which particularly includes the electro-optical mixer (6) and the scattering unit (3'').